SBR No. 37/17-18
DATED 19/6/17
No. 1st & Final Bill

Original/Duplicate/Triplicate

CONTRACT CERTIFICATE

(For Other Works)

EE/ELE/Y/BR.No. 37/17-18 Date 20-6-17

Dt. 20-6-17

Division: **Electrical (Yelahanka)** Sub-Division: **Electricals**

Bill Received No. Dated Divisional / Sub Divisional Cash Book Voucher No..... Dated.....

Job Code :-01-17-000043

Schedule Docket No. Head of Account : P 3110 D.R.No. : Yelahanka

Name of Work : *Providing and Fixing of LED Street Lights Ward No-01 in Byatarayanapura Division.*

Name of Contractor and Full Address: **M/SChaitanya Electricals,**

Reference to Agreement No: EE/Ele/YZ/WO/ 03 /17-18 Date: 3/05/2017

Certified that the measurements were taken by me on 19/6/17 and recorded of Pages 311301 to 313 of measurement Book No. 3141/17-18 and that the work is satisfactorily executed.

For Chaitanya Electricals

Contractor

Officer-in-charge of work

Certified that the measurement were taken by me on 19/6 and found correct. The work is satisfactorily executed.

Proprietor

Certified that the quantities of materials shown in column 3 of Account have been actually brought to site of the work and the contractor has not previously received any advance on this security. These materials are of and imperishable nature and are all required for immediate use on the work in connection with items for finished work have been agreed upon. A normal agreement signed and executed by the contractor is recorded in the office.

Assistant Engineer (Ele)
Sub-Division Officer

II Memorandum of Payment

1) Total value of work done or supplies made as per account within	Bill =	884576=00
2) Deduct amount to be held in reserve being .....percent Rs.....		
3) " Balance		
4) Deduct Payment:	IT 1%	8846=00
a) Amount of previous payment as in the Office Cash Book Voucher	VAT 4%	35383=00
No.....Dated.....S.D. No..... Amount	LWC 1%	8846=00
adjusted towards cash advance recovery of	CBFD,1%	885=00
b) Payments Now made { cost store or other material supplied. recovery of amount creditable to this/other work Amount paid on this bill Cheque / Cash.	deductions	53960=00
	Cheque	830616=00
5) Balance being unpaid value of work done held in reserve.		
6) Deduct cash advance made on the Office cash Book Voucher No..... dated.....less adjustments.		
7) Net amount due to or from Contractor unadjustments items.		
8) Advance to Contractor for materials brought to site (as detailed) within.		
9) Value of Government materials supplied.		
Total amount adjusted -		

Contractor's Signature

For Chaitanya Electricals

Received Rs..... (in words).....

.....

by cash and by adjustment of Payment as per memorandum (in final settlement of all demands)

(For use in the Office)

Proprietor

Witness For Chaitanya Electricals

1.

2.

Dated Signature of Contractor

Proprietor

Paid by me by Cheque No.....Dated.....

Cash Rs.....

Dated.....

Initials of Officer making payment

Stamp

ಲೆಕ್ಕಶೀರ್ಷಿಕೆ P3110 14th Finance Comission

ರೂ. 884576=00 ಅಡಿಯಲ್ಲಿ ಮಾಡಿ ಸ್ವೀಕರಿಸಿದೆ

ರೂ. 830616=00 ಚೆಕ್ ನೀಡಲಾಗಿದೆ

ರೂ. 53960=00 ಕಡಿತ ಮಾಡಿದೆ

Executive Engineer

ಲೆಕ್ಕ ಅಧೀಕ್ಷಕರು

ಕಾ.ಪಾ.ಅ.(ವಿ) ಯಲಹಂಕ ವಲಯ

Sl. No	Description of Item	Unit
	Name Of Work:- Providing and Fixing of LED Street Lights Ward No-01 in Byatarayanapura Division.	
1	LED Street light.Supply of LED Streetlight with pressure die cast aluminum housing body with optimal heat sink for better thermal dissipation. Diffuser with Injection moulded & is made of polycarbonate material with high transmission index, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminare > IK08. Power Factor >0.9 with mains Current should not be greater than 0.1A to 0.7A & Surge Protection- Min 4KV along with Over voltage/Overload, short circuit/ miswiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Over load & Short circuit protection ensures reliable operation in spite of problem in output side. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with .....W System Power consumption. LED Efficiency>130lm/w at 1W & Fixture Efficiency >80lm/w with nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 5 Years against any manufacturing defect working under standard electrical conditions as	each
2	Supplying & fixing of 32 mm dia class A GI pipe bracket up to 2 mtrs long bent at suitable angle and fixing to this bracket 1x40/2x40 or rail or RCC pole/wall using suitable clamps, bolts, and nuts and wiring using suitable capacity wires complete. Using 32mm dia G.I pipe	Each
3	Wiring for lighting / power circuit using one of pvc insulated 1100v grade stranded aluminum unsheathed wire single core cable in open or concealed system of wiring as per IS - 694 : 19904sq mm	Per Mtr
4	Supplying of 1.1KV grade Aerial Bunched Cable Stranded & Compacted Aluminum Phase Conductor, and Stranded Messenger Conductor with all aluminum Alloy, Phase Conductor is insulated with XLPE Compound, insulated Messenger with specified IS-14255:1995 & confirming to GTP of GROUP-A.2 X 16 + 1 X 25 SQ.MM	Per Mtr
5	Stringing of 1.1kv LT Arial Bunched Cable, BESCOM SR	Per Mtr
6	Micro processor based electronic timer consisting of Display Unit(LCD), built in Real Time Clock (RTC) and keypad with option to operate relay/contactor in programmable mode (pre-defined ON/OFF time) or astronomical mode (based on sunset and sunrise depending on the latitude and longitude of the location of installation of Switch) or based on Intensity of natural light (lux level using IR sensor), built in software to select the mode of operation by the user	Each
7	Supply and fixing of 4-pole power contactor with NO/NC contacts on existing wood / panel board using necessary bolts, nuts, washers and wiring etc., complete. d) 100-125 Amps	Each
8	Supplying and fixing miniature circuit breakes on exisiting MCB distribution boards using necessary fixing materials and wiring complete as required. 40-63 Amps SP	Each
9	Wiring for lighting/power circuit using one of PVC insulated 1100v grade, multis and **Copper** conductor single core cable in open or consealed system of wiring.I Group A Materials.g)16 sqmm	Per Mtr
10	Supplying and fixing hylum brand hand plastic sheet 3mm thick with necessary nitches for fixing switches, regulators etc., and fixing on existing wood or metal box using N.F.screws.	SqCm

Previous Measurement		Present Measurement			Total Upto Date		Remarks
Qty	Cost	Qty	Rate	Amount	Qty	Cost	
		56	10500.00	588000.00	56	588000.00	
		103	200.00	20600.00	103	20600.00	
		538	2.00	1076.00	538	1076.00	
		500	50.00	25000.00	500	25000.00	
		500	10.00	5000.00	500	5000.00	
		6	7000.00	42000.00	6	42000.00	
		6	7000.00	42000.00	6	42000.00	
		6	600.00	3600.00	6	3600.00	
		20	10.00	200.00	20	200.00	
		9500	0.10	950.00	9500	950.00	

11	Open Conduit Systeme: Supplying heavy gauge PVC conditpipe,,,,,,,,,, dia confirming to IS 2509 with suitable size bends,junction boxes, adhesibve paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC wall stone structure or plug incase of brick walls and cement plastering damaged portionusing heavy gauge saddles at an interval of 700mm using NF screws.c)32mm dia 2.5mm thick	Per Mtr
12	Supplying and fixing angle iron frame work fabricated out of M.S angle iron... and M.S. flat... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint. a)50X50X6 mm	mtr
13	Supplying and stringing of ACSR Conductor (6/2.59mm Al +1/2.59mm Steel).	Per Mtr
14	1.1 KV Pin Insulator	Each
15	2 Pin 45x45x5mm -510mm	Each
16	Supply and installation /fixing/Provision of outdoor type thermoplastic modular panel enclousure with transparent polycarbonate lid, shock proof, IP 65(weather proof) rust proof, water proof, corrosin proof having internally embedded gasket on both id and flap suitable to fix. single phase/energy meter in suitable base plate and having a provision for fuse/ MCB cutout with suitable transparent hinged flap opening MCB along with complete tamper proof SEALING facility. 300x450x214mm.	Each
17	Supply and Installation / Fixing / Provision of Pole box with HRC Fuse / MCB provision and suitable connector / terminal for 3 Ph / 1 Ph connections with Loop-In & Loop-Out terminals for 10 Sqmm / 25 Sqmm 3.5 C Al/Ar / Cu/Ar Cable and branch out 2.5 Sqmm 2 core Al/Cu PVC Insulated cable, enclosed in a Thermoplastic, Polystyrene enclosure, which should be shock proof, safe, IP65(Weather Proof), rust proof, dust proof, water proof having Internally Embedded Gasket with provision for cable entry through IP65 Thermoplastic, polyamide glands and/or grommets.200mmx200mmx98mm	Each
18	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. And M.S. flat... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint. a)40X40X6mm	Per Mtr
19	Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts and wiring complete. Protection of Overload and Short circuit with thermal Magnetic/Micro processor release and Earth Fault as per IS-13947. (Icu = Ics) THREE POLE 100Amps 25kA.	Each
20	Supplying and running of GI/Copper strips for grounding connections, using necessary fixing materials as required. GI strip 25x3mm	Per Mtr
	Total Rs	

Certificate: 1. Certefied that the Above Work has been carreid out satisfactorily

Assistant Executive Engineer (Ele)
BBMP, Bangalore

		100	20.00	2000.00	100	2000.00	
		19	50.00	950.00	19	950.00	
		1341	30.00	40230.00	1341	40230.00	
		40	20.00	800.00	40	800.00	
		40	120.00	4800.00	40	4800.00	
		6	1500.00	9000.00	6	9000.00	
		15	1000.00	15000.00	15	15000.00	
		15	50.00	750.00	15	750.00	
		15	5500.00	82500.00	15	82500.00	
		6	20.00	120.00	6	120.00	
				884576.00		884576.00	